

# Technical Data



TRB4000TL  
 TRB5000TL  
 TRB6000TL  
 TRB8000TL  
 TRB9000TL  
 TRB010KTL

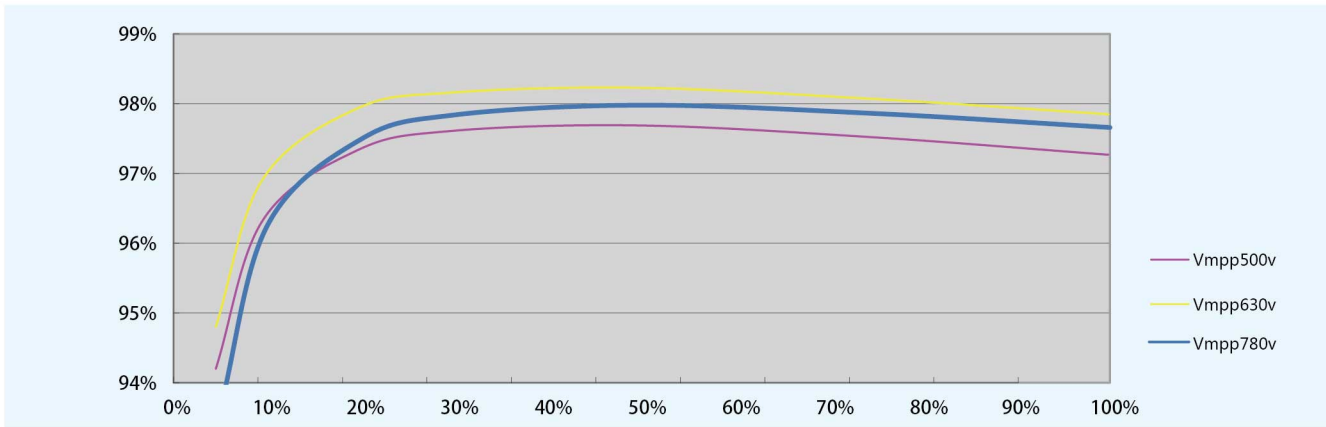
## Features:

- > Max efficiency 98.2%
- > Film capacitor design to assure long lifecycle
- > Fanless cooling design
- > Low noise, extremely silent
- > IP65 protection against water and dust
- > Wide range of input DC and MPPT voltage

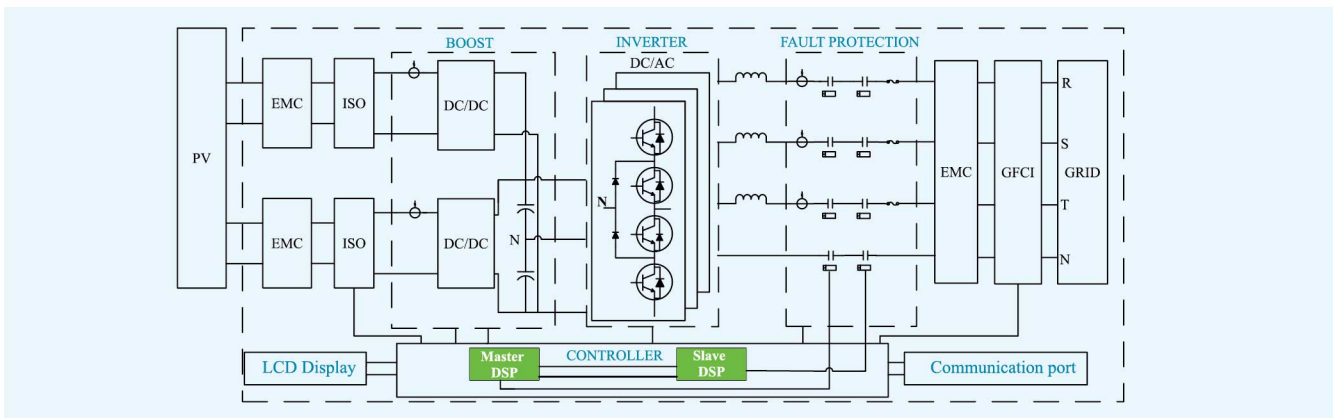
## Certificates and Approvals:

VDE AR-N-4105, VDE 0126-1-1+A1, CE, G83/2, UTE C15-712, MEA, PEA, AS4777, NB/T32004-2013

## Efficiency Curve (TRB6000TL):



## Circuit Diagram:





# TRB Series

TRB4000TL / TRB5000TL / TRB6000TL / TRB8000TL / TRB9000TL / TRB10KTL

Model	TRB4000TL	TRB5000TL	TRB6000TL	TRB8000TL	TRB9000TL	TRB10KTL
Rated AC power	4000 W	5000 W	6000 W	8000 W	9000 W	10000 W
Maximum AC power	4000 VA	5000 VA	6000 VA	8000 VA	9000 VA	10000 VA
<b>Input</b>						
Maximum input power	4250 W	5250 W	6300 W	8400 W	9450 W	10400 W
Maximum DC input voltage	1000 Vdc	1000 Vdc	1000 Vdc	1000 Vdc	1000 Vdc	1000 Vdc
MPPT operating voltage range	200 - 800 Vdc	200 - 800 Vdc	200 - 800 Vdc	200 - 800 Vdc	200 - 800 Vdc	200 - 800 Vdc
Startup voltage	180 Vdc	180 Vdc	180 Vdc	180 Vdc	180 Vdc	180 Vdc
Initial feeding voltage	210 Vdc	210 Vdc	210 Vdc	210 Vdc	210 Vdc	210 Vdc
MPPT number	2	2	2	2	2	2
Maximum input current	10 Adc / 10 Adc	10 Adc / 10 Adc	10 Adc / 10 Adc	10 Adc / 10 Adc	10 Adc / 10 Adc	10 Adc / 10 Adc
Number of DC inputs	1+1	1+1	1+1	1+1	1+1	1+1
DC switch	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
<b>Output</b>						
AC nominal voltage	3N - PE 380/400 Vac					
AC connection	Three phase					
AC voltage Range	310 Vac - 470 Vac					
Frequency range	50 Hz, 60Hz / -5 Hz ... +5 Hz					
Power factor	>0.99 , -0.9 ~ 0.9 controllable					
Maximum output current	7.0 Aac	8.5 Aac	10.0 Aac	12.5 Aac	14.0 Aac	15.2 Aac
DC current injection	< 20 mA	< 20 mA	< 20 mA	< 20 mA	< 20 mA	< 20 mA
THDi	< 3%	< 3%	< 3%	< 3%	< 3%	< 3%
<b>System</b>						
Maximum efficiency	> 98.1%	> 98.1%	> 98.1%	> 98.1%	> 98.1%	> 98.2%
European efficiency	> 97.4%	> 97.4%	> 97.4%	> 97.6%	> 97.6%	> 97.6%
MPPT efficiency	> 99.9%	> 99.9%	> 99.9%	> 99.9%	> 99.9%	> 99.9%
Night power consumption	< 0.2 W	< 0.2 W	< 0.2 W	< 0.2 W	< 0.2 W	< 0.2 W
Topology	Transformerless					
Heat dissipation	Natural Convection					
Insulation monitoring	Integrated					
DC reverse-polarity protection	Integrated					
AC over current protection	Integrated					
Anti-Islanding protection	Integrated					
Residual current detection	Integrated					
Thermal protection	Integrated					
<b>General Parameters</b>						
Dimensions(W×H×D)	540 x 190 x 470 mm					
Weight	23 kg	23 kg	23 kg	24 kg	24 kg	24 kg
Display	3.5 inch LCD					
Function key	4					
Data interface	RS232 / RS485 / RS422 / Ethernet / WiFi / GPRS / USB					
Ambient temperature range	-25 °C - +60 °C					
Operating altitude	< 2000m					
Protection degree	IP65					
Noise emission	< 35dB					
Warranty	Standard 5 years 10/15/20/25 years extension optional					
<b>Certifications</b>						
Safety/EMC	IEC62109-1, IEC62109-2, EN61000-6-2, EN61000-6-3, AS/NZS3100					
Grid code	VDE AR-N-4105, VDE 0126-1-1+A1, CE, G83/2, UTE C15-712, MEA, PEA, AS4777, NB/T32004-2013					